

Table 7: **Pol**

HXB2 Location	Author Location	Sequence	Immunogen	Species(HLA)	References
Pol()	Gag/Pol()		Vaccine	murine()	[Kim1997e]
Vaccine: <i>Vector/type:</i> DNA <i>HIV component:</i> Gag, Pol, VIF <i>Stimulatory Agents:</i> B7 and IL-12 expression vector <ul style="list-style-type: none"> • A gag/pol DNA vaccine delivered in conjunction with the plasmid encoding the co-stimulatory molecules B7 and IL-12 gives a dramatic increase in both the cytotoxic and proliferative responses in mice 					
Pol()	Gag/Pol()		Vaccine	murine()	[Kim1997f]
Vaccine: <i>Vector/type:</i> DNA <i>HIV component:</i> gp160, Gag, Pol <i>Stimulatory Agents:</i> CD86 expression vectors <ul style="list-style-type: none"> • A gag/pol DNA vaccine delivered in conjunction with the plasmid encoding the co-stimulatory molecule CD86 gives an increase in proliferative responses to Pr55 in mice 					
Pol()	Gag/Pol()		Vaccine	chimpanzee()	[Kim1998d]
Vaccine: <i>Vector/type:</i> DNA <i>Strain:</i> MN <i>HIV component:</i> Gag, Pol, Env <i>Stimulatory Agents:</i> CD80 and CD86 expression vectors <ul style="list-style-type: none"> • Co-stimulatory molecules co-expressed with an HIV-1 immunogen in a DNA vaccine used to enhance the immune response – co-expression of CD86, but not CD80, dramatically increased both HIV Env and Gag/Pol specific CTL and Th proliferative responses 					
Pol()	Pol()		HIV-1 infection	human()	[Blankson2001a]
<ul style="list-style-type: none"> • 5/10 chronically HIV infected patients with low CD4+ counts who received HAART therapy experienced immune reconstitution, and displayed p24, p17 and p66 T-helper CD4 proliferative responses, in contrast to 0/8 chronically HIV infected patients with high CD4+ counts at the initiation of antiretroviral treatment • This surprising result could be due to the low CD4 nadir patients being more likely to have thymic regeneration or a peripheral expansion of T-cells 					
Pol()	p66()		HIV-1 infection	human()	[Oxenius2000b]
<ul style="list-style-type: none"> • Patients who started therapy at acute HIV infection (three with sustained therapy, two with limited therapy upon early infection) had strong HIV specific CD4 proliferative responses and were able to maintain a CTL response even with undetectable viral load – three patients that had delayed initiation of HAART had no HIV specific CD4 proliferative responses and lost their CTL responses when HAART was eventually given and their viral loads became undetectable 					
Pol()	RT(248–256 HXB2)		<i>in vitro</i> stimulation	human(DR5)	[Manca1995b]
<ul style="list-style-type: none"> • CD4+ T-cell lines from uninfected individuals by stimulation with p66-pulsed APC • TcR Vβ Dβ Jβ sequences were obtained from p66-specific T-cell clones • There were multiple responses to peptides throughout p66 • Response to peptide 248-256 was associated with DR5 					

HIV Helper-T Cell Epitopes

Pol()	RT()	Vaccine	murine(H-2 ^d)	[Kim2000a]
Vaccine: <i>Vector/type:</i> DNA <i>HIV component:</i> Gag, Pol, Env <i>Stimulatory Agents:</i> IL-2, IL-4 and IFN γ expression vectors				
<ul style="list-style-type: none">• Co-stimulatory molecules co-expressed with an HIV-1 immunogen in a DNA vaccine used to enhance the immune response – co-expression of Th1 cytokine IFN-γ drove Th1 immune responses and enhanced CTL responses				
Pol()	RT()	Vaccine	murine(H-2 ^d)	[Burnett2000]
Vaccine: <i>Vector/type:</i> Salmonella <i>HIV component:</i> RT epitope				
<ul style="list-style-type: none">• A live attenuated bacterial vaccine, Salmonella SL3261-pHART, with an inserted HIV RT gene in the Lpp-OmpA-HIV fusion protein, induced a lymphoproliferative Th response in BALB/c mice				